

BOGNOR URBAN DISTRICT.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

AND THE REPORT OF THE

CLIMATOLOGICAL SOCIETY,

FOR THE YEAR 1909.

TO THE CHAIRMAN AND MEMBERS OF THE BOGNOR URBAN DISTRICT COUNCIL.

Gentlemen,

I beg to lay before you my 20th Annual Report on the health and sanitary condition of the Urban District of Bognor for the year ended 31st December, 1909.

The area of the District is 865 acres and contains about 1797 inhabited houses.

During the last five years the increase in the number of inhabited houses has been as follows:—

In 1905 there were 1531 Inhabited Houses.

„ 1906	„	1586	„	„
„ 1907	„	1625	„	„
„ 1908	„	1773	„	„
„ 1909	„	1797	„	„

Eighty-nine plans of new buildings and 16 plans of alterations to old buildings were approved by the Council. Fifty three houses were erected during the year and twenty eight are in course of erection.

The population estimated to the 30th June, 1909, is 7892.

The gross number of deaths during the year was 103, viz:—51 males and 52 females. These deaths were distributed over the 12 months as follows:—

	MALES.	FEMALES.	TOTAL
January	4	3	7
February	4	5	9
March	4	9	13
April	4	6	10
May	7	7	14
June	4	2	6
July	3	4	7
August	4	2	6
September	7	3	10
October	4	2	6
November	4	5	9
December	2	4	6
	—	—	—
	51	52	103
	—	—	—

Included in this number are seven deaths which occurred in Public Institutions in the District.

I have received from the Medical Officer of Health for Chichester the names of nine Bognor residents who died in the Chichester Infirmary, Asylum, or Workhouse during the year. These deaths, in accordance with the instructions of the Local Government Board, are not included in the figures used in arriving at the death rate of the District, but they are included in Table IV which deals with deaths at the various ages of residents whether occurring in or beyond the District.

The total number of deaths, and the death rates since the increase of the area of the district, which took place on 1st October, 1900, are as follows:—

	TOTAL.	RATE.
1901	66	10.5
1902	80	12.4
1903	76	11.4
1904	82	11.9
1905	71	10.0
1906	66	9.0
1907	75	10.0
1908	69	8.9
1909	103	13.0

The estimated death rate is 13.0 per 1000.

The increase in the death rate for the year under report is partly accounted for by the large percentage of deaths of persons of 80 years of age and upwards, and of children under five years of age during the whooping cough epidemic in the spring of the year.

The various ages at which death occurred during the year under report were as follows:—

Under 1 year	11
1 year and under 5 years	11
5 years and under 15 years	5
15 years and under 25 years	4
25 years and under 65 years	29
65 years and under 80 years	22
80 years and over	21
	<hr/>
	103
	<hr/>

The ages of death of those of 80 years and upwards were as follows:

3	at	80
3	„	81
2	„	82
3	„	83
2	„	84
1	„	85
3	„	87
1	„	88
1	„	90
2	„	93

The chief causes of death were as follows:—

Whooping cough	...	...	8	Diphtheria	...	...	1
Diarrhœa	...	...	1	Enteritis	...	...	1
Erysipelas	...	...	1	Pulmonary Tuberculosis	...	...	5
Other Tuberculous diseases	...	...	5	Cancer and other malignant diseases	...	...	12
Bronchitis	...	...	5	Pneumonia	...	...	7
Cirrhosis of liver	...	...	1	Premature birth	...	...	1
Diseases and accidents of parturition	...	...	1	Heart diseases	...	...	17
Accidents	...	...	2	Suicide	...	...	1
Senile decay	...	...	16	All other causes	...	...	18

One of the deaths from accident was due to a fall from a gangway, and the other was due to exhaustion following fracture of the thigh in a female aged 83 years.

During the year there were, as stated above, 11 deaths of infants under 1 year of age, which gives an infantile mortality rate of 1.3 per 1000 general population, and 83.3 per 1000 births registered.

These were distributed over the twelve months as follows:—

	Males.	Females.	Total.
January	—	1	1
February	1	—	1
March	—	—	—
April	2	—	2
May	2	2	4
June	—	—	—
July	1	—	1
August	—	—	—
September	—	1	1
October	—	—	—
November	1	—	1
December	—	—	—
	<hr/> 7	<hr/> 4	<hr/> 11

Under the Infectious Diseases Notification Act, 1889, adopted by your Council in 1891, I have received 17 Certificates, viz. :—Scarlet Fever, 4; Diphtheria, 9; Enteric Fever, 1; Erysipelas, 3.

This is a considerable decrease in the totals notified during the last 10 years, which were as follows :—

1900	37	1905	34
1901	29	1906	35
1902	39	1907	38
1903	26	1908	33
1904	35	1909	17

The above notified cases were spread over the twelve months as follows :—

	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.
January	—	—	1	—
February	—	—	—	—
March	—	—	—	—
April	1	1	—	—
May	—	1	—	—
June	1	1	—	—
July	—	1	—	—
August	—	2	—	—
September	—	2	—	—
October	1	1	—	1
November	—	—	—	—
December	1	—	—	2

Only one of these cases, namely of Diphtheria, occurred in a Public Institution in the Town.

Two cases terminated fatally, namely one from Diphtheria, and one from Erysipelas, which gives a death rate from notifiable diseases of 0.2 per 1,000 estimated population.

One of the cases of Scarlet Fever, and one of Diphtheria, were removed to the Isolation Hospital, where they both recovered.

Disinfection of premises occupied by patients suffering from notifiable diseases was carried out by the sanitary authority in all cases.

The number of births registered in the District was 132, viz :—73 males and 59 females.

This gives a birth rate of 16.7 per 1,000 estimated population.

The births were as follows, viz :—

	MALES.	FEMALES.	TOTAL.
January	9	7	16
February	5	5	10
March	1	2	3
April	7	5	12
May	12	6	18
June	4	6	10
July	9	5	14
August	6	2	8
September	7	4	11
October	5	5	10
November	4	7	11
December	4	5	9
	<hr/> 73	<hr/> 59	<hr/> 132

The figures for the previous five years were as follows :—

	MALES.	FEMALES.	TOTAL.	RATE.
1904	75	62	137	19.9
1905	59	59	118	16.7
1906	52	79	131	18.0
1907	61	72	133	17.7
1908	60	61	121	15.7

The housing accommodation for the working classes is adequate and fit for habitation.

The water supply of the Town is ample in quantity and still maintains its high standard of purity as shown by the accompanying report. It is drawn from deep wells at the foot of the Downs, about 7 miles distant, where there is a pumping station which fills a covered service reservoir on the side of the hill, from which the water falls by gravitation to the town.

The Laboratory,

11, Billiter Square,

London, E.C.

July 15th, 1909.

REPORT ON A SAMPLE OF WATER RECEIVED ON JULY 8th FROM
THE BOGNOR WATER COMPANY.

Sample sealed :—Monogram "H.G.S."

The water was quite clear and, when viewed through a stratum of 2 feet deep, exhibited the faint blue tint of organically pure water. Its composition, in parts per 100,000, was found to be as under :—

Chlorine	...	...	...	2.60
Sulphuric Acid	...	...	...	0.52
Nitric Acid	...	...	...	2.40
Phosphoric Acid...	...	...	...	None
Free Ammonia	...	...	...	0.0024
Albuminoid Ammonia	...	...	...	0.0047
Oxygen absorbed from permanganate at				
80 degs. F. in 15 mins.	...	...	...	0.0116
Ditto, in 4 hours	...	...	...	0.0206
Total solids dried at 282 degs. F.	...	...	...	35.20
Loss on Ignition	...	...	...	3.36
Appearance of solids on heating	...	...	...	No visible change
Permanent Hardness	...	...	...	6.1
Temporary "	...	...	...	21.6
Total "	...	...	...	26.2

Bacterioscopic Examination.

Total number of organisms growing in gelatine per cubic				
centimetre	...	...	...	178
Ditto growing at blood-heat in agar	...	...	...	60
B. Coli	...	...	...	Not detectable in 36 cubic centimetres

Bognor Water Company.

The results of both chemical and bacterioscopic examination are highly satisfactory. The supply is of high organic purity, and does not show the least indication of the presence of any contamination. It has the character of perfectly pure water from the chalk, and is in every way fit for a public water supply.

OTTO HEHNER.

The milk shops, dairies, and cowsheds have been inspected from time to time and found generally in a cleanly and satisfactory condition. In the case of one cowshed, where defects were found, instructions were given to have the floor re-cemented and efficiently drained. Two dairies were found in an unsatisfactory condition; in the one case a new dairy is to be built and the other has been closed.

The milk supply is good and is chiefly imported from the neighbouring farms.

During the year under report three samples of milk were taken under the Sale of Food and Drugs Act, for analysis by the Public Analyst, with the result that one conviction for adulteration of the milk was obtained.

There are five slaughter houses in the District, all of which have been periodically inspected during the year. They have been inspected also at times of slaughtering. There is no Inspector with a special certificate in meat inspection.

Two complaints were made of meat suspected of being unfit for consumption. The shops from which the samples were obtained were inspected by myself and the Sanitary Inspector, and all the meat exposed for sale was found in a good condition.

The sewers and drains in all parts of the District are sufficient. There is an adequate number of ventilating shafts.

One case of overflow of sewage was reported in the lowest part of the District. This was owing to an exceptional quantity of storm water, and instructions were given to prevent the recurrence of the nuisance.

The Sewage is disposed of by the water carriage system with outfall into the sea.

During the season the house refuse is collected (in covered carts provided by the Council) twice a week; during the rest of the year it is collected once a week. Thirty houses have been provided with new sanitary dust bins with covers.

During the year there were fifty-one nuisances reported to the Sanitary Authority; in twenty-three of these cases notices were served for abatement, which have all been complied with; the remaining twenty-eight were abated without notice being served.

The water of two wells in the District was found upon analysis to be unfit for domestic purposes. Notice was served on the owner to connect the houses with the Water Company's mains. This was carried out.

No injurious or offensive trades are carried on in the district.

The Public Elementary Schools are supplied with town water and are in a sanitary condition. During the summer vacation they are thoroughly cleansed and disinfected.

A special School Medical Officer has been appointed by the County Council for the inspection of the children in the Public Elementary Schools.

The Isolation Hospital has been finished. The Hospital is divided into two blocks—one for scarlet fever and one for diphtheria, each block being subdivided into two wards, for male and female. Each ward has a capacity of six beds. It is intended, at present, to put three beds only in each ward, which will give ample accommodation in any ordinary outbreak of infectious disease. In the event of an epidemic the wards could be fully furnished at very short notice.

I would beg to call your attention to the General Order issued by the Local Government Board, dated 18th December, 1908, which came into force on the 1st of January, 1909—cited as the Public Health (Tuberculosis) Regulations, 1908—requiring notification to the Medical Officer of Health of all pauper cases of Pulmonary Tuberculosis in the District, in order that particulars may be recorded of the subsequent history of the cases and the necessary statistical work facilitated. This will also enable the Sanitary Authority thoroughly to carry out the disinfecting and cleansing of the rooms and dwellings of those who are, or have been suffering from the disease, and will tend, no doubt, in many cases, to prevent its further spread. Under this Act eight cases have been registered. Cards have been printed giving advice to Consumptives as to personal precautions and general precautions. Directly a case is notified one of these cards is sent, so that the person affected may learn how best to combat this disease. There is no hospital for the accommodation of these cases.

The factories on the register at the end of the year and under the supervision of the Council are five in number, and are classified as follows :—

Steam Laundry	1	Forge Contractor	1
Mineral Water Works	1	Printers	2

The Workshops on the register at the end of the year were seventy-one in number, and are classified as follows —

Bakehouses	...	...	9	Dressmakers	...	...	9
Tailors	...	...	7	Laundries	...	...	4
Carpenters	...	...	11	Shoemakers	...	...	7
Plumbers	...	...	4	Coach Builders	...	...	3
Horse Farriers, &c.	...	...	4	Watch Makers	...	...	4
Undertakers and Cabinet Makers	2			Cycle Manufacturers	...	...	3
Harness Makers	...	2		Brick Makers	...	...	2

All the above Factories and Workshops have been inspected during the year; six defects in the sanitary accommodation were found. All have been remedied.

Systematic inspections of the district have been made from time to time, or as occasion required, by myself or the Sanitary Inspector. Regular monthly reports of the work have been laid before the Sanitary Committee. Besides this general supervision, I have paid fifty-three special visits in cases where required.

The scavenging and watering of the streets under the control of the Council have been thoroughly and systematically carried out. New covered hand barrows have been supplied for the use of the street scavengers which are a great improvement on the old open wheel barrows. Water standards have been placed in various parts of the town for the convenience of watering the streets, and twelve new fire hydrants have been placed in positions in the districts which are becoming more thickly populated.

The roads and streets under the control of the Council have been kept in a good state of repair. The private roads at the west end of the town, especially Nyewood Lane, are in a very unsatisfactory condition, and I hope that agreement will soon be arrived at between the Council and the owners, in order that these roads may be put in thorough repair.

The ventilation of the underground lavatory at the pier, which was not quite satisfactory, has now been altered. Large ventilating gratings have been made, communicating with the open air, with the result that the ventilation is now quite satisfactory. The proposed lavatory for females at the west end of the town has not yet been provided. It is necessary that one should be erected before the coming season.

Part III of the Public Health Acts Amendment Act, 1907, has been put in force in the district. No action, under Sections 39-42, relating to the conversion of privies to the water carriage system, has been taken, as there are only two cesspools in the district, and these are shortly to be done away with and the houses drained into the main sewer.

Only modern types of wash-out closets are allowed to be erected in the district.

I enclose Tables I, II, III, IV and V specially required by the Local Government Board, and I take this opportunity of thanking the members of the Sanitary Committee and the Inspector of Nuisances for the courtesy and help they have extended to me during the year.

I beg to remain,

Your Obedient Servant,

W. CONWAY-COOKE,

Associate of King's College, London,
Fell. Royal Institute of Public Health,
Medical Officer of Health.

Bognor,

4th March, 1910.

TABLE I.

Vital Statistics of Whole District during 1909 and previous Years.

Name of District: BOGNOR URBAN SANITARY.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
		Number.	Rate*	Under 1 Year of Age.		At all ages.					Number	Rate.*
				Number.	Rate per 1,000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1899.	4775	80	16.7	17	212.5	71	14.8					
1900.	4856	81	16.6	14	172.8	73	15.0	6	6			
1901.	6232	108	17.3	7	64.8	66	10.5	5	5			
1902.	6439	145	22.5	14	96.5	80	12.4	5	5			
1903.	6647	118	17.7	7	59.3	76	11.4	5	5			
1904.	6854	137	19.9	17	124.0	82	11.9	1	1			
1905.	7062	118	16.7	15	127.1	71	10.0	2	2			
1906.	7269	131	18.0	11	83.9	66	9.0	3	3			
1907.	7477	133	17.7	9	67.6	75	10.0	4	4			
1908.	7685	121	15.7	10	82.6	69	8.9	4	4	6	71	9.2
Averages for years 1899-1908.	6529.6	117.2	17.8	12.1	109.1	72.9	11.3	3.8	3.8			
1909.	7892	132	16.7	11	83.3	103	13.0	7	7	9	105	13.3

*Rates in Columns 4, 8 and 13, calculated per 1,000 of estimated population.

Area of District in acres }
 (exclusive of area } 865 Acres.
 covered by water }

Total population at all ages 6180

Number of inhabited houses 1210

N.B.—Until the 1st Oct., 1900, the area of the District was 503 acres. On that date the area was increased by the addition of 362 acres.

Average number of persons per house 5.1

At Census of 1901.

1.	2.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.
<i>Mercy's Taylors' Convalescent Home for Men.</i> <i>Mercy's Taylors' Convalescent Home for Women.</i> <i>Valence's Convalescent Home for Surrey Women.</i> <i>Cambridge House (Children).</i> <i>Weston's Convalescent Home (Women).</i> <i>Patience Mary's Memorial Home (Women).</i> <i>Red Manorial Home.</i> <i>Arthur's Home (Children).</i> <i>Princess Mary's Convalescent Home (Children).</i> <i>Rest Lodge.</i> <i>Spring Cottage.</i> <i>Monks' Home.</i> <i>Chichester House.</i>	Westhampton Union. Chichester Infirmary. Various London and Provincial Hospitals and Convalescent Homes. Various Sanatoria for the open air treatment of Pulmonary Tuberculosis. Gralingwell Asylum situated at Westhampton near Chichester.

The Union Workhouse is not within the District.

TABLE III.

Cases of Infectious Disease notified during the Year 1909.*Name of District: BOGNOR URBAN SANITARY.*

<u>NOTIFIABLE DISEASE.</u>			<u>AT ALL AGES.</u>		<u>TOTAL CASES REMOVED TO HOSPITAL.</u>	
Small-pox	...	...	—	...	...	—
Cholera	...	...	—	...	...	—
Diphtheria (including Membranous croup)			9	...	...	1
Erysipelas	...	...	3	...	...	—
Scarlet Fever	...	...	4	...	...	1
Typhus Fever	...	...	—	...	...	—
Enteric Fever	...	...	1	...	...	—
Relapsing Fever	...	...	—	...	...	—
Continued Fever	...	...	—	...	...	—
Puerperal Fever	...	...	—	...	...	—
Plague	...	...	—	...	...	—
Totals	...	...	17	...	...	2

Bognor Isolation Hospital provided by the Bognor Urban District Council. Total available beds: 4.

Number of Diseases that can be concurrently treated: 2.

TABLE IV.
Causes of, and Ages at, Death during Year 1909.
Name of District: BOGNOR URBAN SANITARY.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Total deaths whether of Residents or non Residents in Public Institutions in the District
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
1	2	3	4	5	6	7	8	9
Small-pox ...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	...
Scarlet fever ...	...	...	...	...	...	...	...	...
Whooping-cough ...	8	5	3	...	...	...	...	...
Diphtheria and membranous croup	1	...	1	...	...	...	...	...
Croup ...	...	...	...	...	...	...	...	...
Fever {	Typhus ...	...	...	...	...	...	...	...
	Enteric ...	...	...	...	...	...	...	...
	Other continued ...	...	...	...	...	...	...	...
Epidemic influenza ...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	1
Enteritis ...	1	1	...	...	...	...	...	...
Gastritis ...	...	...	...	...	...	...	...	...
Puerperal fever ...	...	...	...	...	...	...	...	...
Erysipelas ...	1	...	...	1	...	...	...	...
Phthisis, (Pulmonary Tuberculosis)	5	...	...	...	...	5	...	...
Other tubercular diseases ...	4	...	1	2	1	...	...	1
Cancer, malignant disease ...	12	...	...	...	...	5	7	...
Bronchitis ...	6	...	...	...	...	1	5	...
Pneumonia ...	6	...	3	1	...	2	...	1
Pleurisy ...	...	...	...	...	...	...	...	...
Other diseases of Respiratory organs	...	...	...	...	...	...	...	...
Alcoholism—Cirrhosis of liver ...	1	...	...	...	...	1	...	...
Venereal diseases ...	...	...	...	...	...	...	...	...
Premature birth ...	1	1	...	...	...	...	...	...
Diseases and accidents of parturition	1	...	...	...	...	1	...	...
Heart diseases ...	16	1	...	...	...	5	10	1
Accidents ...	2	...	...	1	...	...	1	...
Suicides ...	1	...	...	...	...	1	...	...
Senile decay ...	19	...	...	...	...	...	19	...
All other causes ...	20	2	...	...	3	9	6	3
All Causes ...	105	10	8	5	4	30	48	7

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

Births in the year	{	legitimate 128.		Population.
	{	illegitimate 4.		Estimated to middle of 1909.
				7892.
Deaths in the year	{	legitimate infants 10		
	{	illegitimate infants 1		
			Deaths from all Causes at all Ages	103

Bognor Climatological Society.

REPORT OF THE OBSERVERS FOR 1909.

General.—As will be seen from Table I, the mean readings for the year have been below the twelve years' average, 1897-1908, except in those of bright sunshine and rainfall, the former giving an excess over the average of 83 hours, and sharing with Salcombe, in Devonshire, the honour of first place in the British Isles for the year. The early months were good, February and May being especially fine and bright, after which cold damp weather set in, the summer months being exceptionally uncongenial, and with the exception of the first fortnight in August and most of November these conditions prevailed right up to the end of the year.

The most remarkable feature was the very heavy storm which passed over the country in the last week of October, 1·68 inches of rain being recorded at Bognor between 9 a.m. on the 26th and 9 a.m. on the 27th, and 3·21 inches in four days. This constitutes a record, both for the amount of rain in the twenty-four hours and also in the week.

Air-Pressure.—Table II.—Table II gives the monthly barometric readings, showing the maximum, minimum and mean at 9 a.m. and the absolute range during each month. With the exception of February, when the barometer was very steady, the variations were considerable, especially in the months of March, June, July, September, October and December, when unsettled conditions prevailed. January, February, May and November showed high pressure systems, the average for the month being over 30 inches. During March the Barometer did not reach 30 inches throughout the month, and twice only during October.

The highest pressure was recorded on January 2nd, 30·674 inches of mercury; and the lowest on December 3rd, 4th and 22nd with readings below 29 inches.

Temperature.—Table III.—The year has shown great extremes of temperature, the average readings being all below those of the twelve year period. August was the warmest month, and gave the highest temperature yet recorded at Bognor, viz., 81 degrees on the 9th of the month. February was the coldest, with an average temperature of 38·4 degrees; but the absence of rain and abundance of sunshine made it a very pleasant month. The readings in the screen were lower than those on the grass on fourteen occasions. There were 112 ground frosts recorded, while the temperature in the screen fell below the freezing point on 49 days, the lowest readings being 20·9 degrees in the screen on March 3rd and 16·8 degrees on the ground on December 21st. The mean range of temperature was about the average, being 10·9 for the year, the smallest range being in October, 8·2 degrees, and the greatest in May, 15·6 degrees. The temperature four feet below the ground reached its *critical* point of 56 degrees on July 20th, and its highest point, 58·4 degrees on the 19th August, commencing to descend on the 25th August, and falling to 56 again on the 27th October. In December the subsoil thermometer was out of order, but a new and improved pattern has now been substituted for it.

Bright Sunshine.—Table IV.—The past year has given 83 hours of bright sunshine above the twelve years' average. The best months were February, April, May and November. February, May and November showed record amounts for the month, and the amount recorded in April was exceeded only in 1906. The totals given by the Meteorological Office for the year

show that Bognor well maintained its reputation as one of the sunniest towns in England, Salcombe, in Devonshire, with the same percentage of the possible amount, exceeding it by eleven hours only. The worst months were March, June and July, each of which showed a deficiency.

Rainfall.—Table V.—The rainfall for the year exceeded the average by over $4\frac{1}{2}$ inches. March, June, September, October and December were all very wet months, the heavy fall in the last week of October breaking all records. The only month to show a deficiency was February, when three 10ths of an inch only was measured in the gauge. In reference to the number of rain days given in the table, it should be stated that $\cdot 005$ inch is reckoned as $\cdot 01$ inch, and by the Meteorological Office accounted a rain day. This is generally merely deposit of dew, and so, on most of these occasions, no rain actually fell during the day in which it is recorded.

Wind.—Table VI.—Table VI. shows the direction of the wind as observed at 9 a.m. each morning. The year has been exceptional in that N.E. winds prevailed more often than S.W. The number of times the wind blew from between S. and N.W. was 205, and between N. and S.E. was 159. On one day in November there was a perfect calm at the time of observation.

Thunder and Lightning, &c.—Lightning only was observed on January 15th, June 12th, September 17th and 22nd and December 3rd.

Thunder, without lightning, was heard on the 29th June and the 20th August.

There were thunder storms on five occasions, namely 17th April, 10th July, 21st and 25th August, and 10th September.

Snow and Hail.—Snow fell from the 25th to 28th February, on March 2nd, 3rd, 12th to 15th, and December 15th and 16th. A few flakes were seen about 9.15 a.m. on November 16th, but they melted before reaching the ground.

Other Phenomena.—Gorgeous sunsets were observed in August, and on the 13th of the month the after-glow in the sky persisted until nearly 9 p.m., more than $1\frac{1}{4}$ hours after sunset.

Tables VII. and VIII.—These tables give the Bright Sunshine and the Rainfall of the year for towns along the South Coast, extracted from the Meteorological Office Annual Returns, and show the very favourable position of Bognor in both these important climatic respects.

H. C. L. MORRIS, M.D., F. R. MET. SOC.	}	OBSERVERS.
HERBERT GARDNER.		

All communications and inquiries in regard to the Climatological Report should be addressed to Mr. H. Gardner, Honorary Secretary of the Climatological Society, Waterloo Square, Bognor.

TABLE I.

MEAN READINGS FOR THE YEAR 1909, AND AVERAGE READINGS FOR THE 12 YEARS, 1897-1908.

	<i>Barometer Inches.</i>	<i>Temperatures in the Screen.</i>						<i>Sunshine.</i>			<i>Relative Humidity.</i>	<i>Rainfall.</i>	
		<i>9 a.m.</i>	<i>Max.</i>	<i>Min.</i>	<i>Mean</i>	<i>Mean</i>	<i>Min. on Grass.</i>	<i>Hours.</i>	<i>Per cent. of possibl.</i>	<i>Sunless days.</i>		<i>Inches.</i>	<i>No. of days.</i>
Year 1909	29.927	49.8	54.4	43.5	49.0	10.9	38.2	1979.9	45	50	80.4 $\frac{9}{10}$	28.9	200
Av. 12 years	29.982	51.1	55.7	44.8	50.3	10.9		1896.6	43	50	80.0 $\frac{9}{10}$	24.3	169
Diff. from Av.	-0.055	-1.3	-1.3	-1.3	-1.3	0		+ 83.3	+ 2	0	+ 0.4 $\frac{9}{10}$	+ 4.6	+ 31

TABLE II.
AIR PRESSURE.

BAROMETER READINGS REDUCED TO 32° AND M.S.L.

<i>Month.</i>	<i>Maximum observed Reading.</i>	<i>Date.</i>	<i>Minimum observed Reading.</i>	<i>Date.</i>	<i>Mean for Month.</i>	<i>Absolute Range.</i>
	<i>9 a.m.</i>	<i>ins.</i>	<i>9 a.m.</i>	<i>ins.</i>		
January.	30.674	2nd	29.432	15th	30.174	1.242
February.	30.463	14th	29.416	10th	30.090	0.047
March.	29.884	12th	29.180	3rd	29.503	.704
April.	30.417	3rd	29.639	24th	29.990	.427
May.	30.416	3rd	29.550	26th	30.104	.866
June.	30.350	18th	29.399	24th	29.955	.951
July.	30.242	20th	29.579	7th	29.952	.663
August.	30.276	11th	29.397	18th	29.961	.879
September.	30.171	3rd	29.632	7th	29.944	.539
October.	30.054	10th	29.335	28th	29.714	.719
November.	30.456	24th	29.476	30th	30.050	.980
December.	30.408	9th	28.860	4th	29.691	1.548
Year.	30.674	2nd Jan.	28.860	4th Dec.	29.927	1.814

TABLE III.

Average Temperature in Shade, on Grass, and Subsoil 1909.											Sub Soil.	Frosts.	
1909.	Mean Maximum.	Mean Minimum.	Average Mean.	Mean Range.	Greatest range from min. to max.	Date.	Highest. Temperature.	Lowest. Temperature.	Mean Minimum on grass.	Lowest on Grass.	Average Temperature 4 ft. below Grass at 9 a.m.	No. of times 32° and under were registered in box.	Do. on Grass.
January.	44.2	35.6	39.9	8.6	17.4	on 29th	51.0 on 11th	26.1 on 28th	30.2	19.3 on 26th	46.8	8	17
February.	43.5	33.3	38.4	10.2	23.0	,, 23rd	50.8 ,, 15th	26.9 ,, 23rd	28.8	18.2 ,, 23rd	44.2	15	23
March.	43.8	35.4	39.5	8.4	18.0	,, 5th	50.7 ,, 25th	20.9 ,, 3rd	31.6	18.0 ,, 5th	43.0	8	17
April.	53.1	42.6	47.9	10.5	21.1	,, 11th	58.6 ,, 14th	31.1 ,, 2nd	35.9	25.8 ,, 2nd, 10th	46.0	1	9
May.	59.6	44.0	51.8	15.6	27.1	,, 12th	68.3 ,, 12th	32.4 ,, 2nd	38.7	26.9 ,, 3rd	49.4	0	7
June.	60.3	49.1	54.7	11.2	19.2	,, 28th	68.5 ,, 18th	42.4 ,, 28th	42.9	30.8 ,, 11th	52.5	0	1
July.	65.0	53.8	59.4	11.2	18.0	,, 1st	70.3 ,, 28th	45.4 ,, 1st	49.1	36.0 ,, 1st	55.2	0	0
August.	69.0	55.1	62.1	13.8	22.4	,, 8th	81.0 ,, 9th	46.2 ,, 22nd	48.9	40.5 ,, 3rd	57.9	0	0
September.	62.2	51.2	56.7	11.0	19.8	,, 1st	68.9 ,, 12th	41.3 ,, 1st	45.4	32.5 ,, 2nd	57.1	0	0
October.	57.9	49.7	53.8	8.2	19.6	,, 9th	62.8 ,, 3 & 8	30.7 ,, 31st	44.1	20.3 ,, 31st	56.3	1	3
November.	48.6	37.5	43.1	11.1	18.0	,, 9th	55.0 ,, 3rd	29.7 ,, 24th	32.0	22.7 ,, 21st	51.0	5	17
December.	45.9	34.4	40.2	11.5	23.6	,, 21st	51.6 ,, 2nd	25.3 ,, 21st	30.3	16.8 ,, 21st	46.8	11	18
Average for the year.	54.4	43.5	49.0	10.9	27.1	,, 12 May	81.0 ,, 9 Aug	25.3 on 21st Dec	38.2	16.8 on 21st Dec	50.9 11 Months	Total 49	Total 112

TABLE IV.

1909.	Bright Sunshine. By the Campbell-Stokes Recorder.						Cloud 1 to 10.
	Totals.	Per centage of possible amount.	Number of Sun-recorded Days.	Brightest Days.		Per centage of possible amount.	Average amount of cloud at 9 a.m., 1 to 10.
	Hours.			Date.	Hours.		
January.	82.9	32	21	23rd	7.3	87.9	6.8
February.	129.9	47	24	22nd	9.6	96.9	5
March.	106.2	29	26	7th	9.4	80.3	6.4
April.	232.3	56	29	9th	12.4	90.5	4.1
May.	348.2	75	31	30 & 31	14.7	96.0	3
June.	150.6	31	28	8th	13.7	83.0	7
July.	204.8	42	31	20th	13.8	87.3	7
August.	257.5	58	30	6th	13.9	97.2	5
September.	164.7	44	26	3rd	12.1	96.8	6
October.	99.9	31	23	6th	9.8	93.3	7
November.	137.8	53	26	6th	8.7	98.8	4.2
December.	65.1	27	20	8th	7.1	92.2	6.5
Totals.	1979.9	45	315	May 31st			

TABLE V.

Rainfall.						
<i>Month.</i>	<i>Total inches.</i>	<i>Mean 12 Years.</i>	<i>Greatest Fall in 24 hours from 9 a.m.</i>		<i>Number of rain days.</i>	<i>Relative Humidity Saturation=100</i>
			<i>Inches.</i>	<i>Date.</i>		
January	1·16	2·23	0·29	14th	18	89·5
February	0·30	2·11	0·10	9th & 10th	8	83·5
March	3·23	1·57	0·50	6th	26	84
April	1·13	1·72	0·35	19th	14	77
May	1·45	1·78	0·82	24th	8	69
June	2·54	1·87	0·35	23rd	17	77
July	1·76	1·16	0·88	27th	12	74·5
August	2·40	1·97	0·71	24th	13	74·5
September	3·40	1·61	0·89	28th	18	81·5
October	6·17	2·89	1·68	26th	27	84
November	1·25	2·69	0·85	29th	16	85
December	4·10	2·78	0·85	29th	24	85
Year	28·9	24·31	1·68	26th Oct.	200	<i>Mean.</i> 80·4

TABLE VI.

1909.	<i>Wind as observed at 9 a.m.</i>									CALM.
	Number of times.									
	N.	N.E.	E.	S.E.	S.	S. W.	W.	N. W.		
January.	0	8	3	1	0	3	9	7	0	
February.	3	6	4	4	1	1	2	7	0	
March.	5	8	0	3	6	3	3	3	0	
April.	0	3	2	8	0	2	11	4	0	
May.	1	2	11	2	2	7	4	2	0	
June.	0	9	5	1	0	6	3	6	0	
July.	1	2	0	0	1	11	8	8	0	
August.	3	5	2	0	3	8	7	3	0	
September.	1	13	1	5	0	3	2	5	0	
October.	1	3	0	2	2	14	3	6	0	
November.	6	12	1	1	0	3	1	5	1	
December.	3	5	2	1	0	10	4	6	0	
Totals.	24	76	31	28	15	71	57	62	1	
	159				205					

TABLE VII.

TABLE VIII.

Bright Sunshine.			Rainfall.	
	<i>Hours.</i>	<i>Per centage of possible Amount.</i>		<i>Inches.</i>
Salcombe	1992	45	Folkestone	25·8
BOGNOR	1981	45	Weymouth	27·7
Falmouth	1975	45	BOGNOR	29·0
Penzance	1971	45	Dover	29·5
Worthing	1958	44	Brighton	31·0
Weymouth	1941	44	Hastings	31·4
Dover	1927	44	Worthing	32·1
Bournemouth	1906	43	Bournemouth	33·4
Eastbourne	1904	43	Ventnor (I.W.)	34·8
Ventnor (I.W.)	1901	43	Plymouth	35·2
Hastings	1878	43	Eastbourne	35·2
Plymouth	1861	42	Penzance	35·5
Bexhill	1860	42	Falmouth	37·3
Folkestone	1859	42		
Brighton	1857	42		
WESTMINSTER	1373	31	WESTMINSTER	24·9